(19) World Intellectual Property Organization

International Bureau



| 18019 BYNDID| || BICKS 11011 BENK CENE BINK || 11 11 BENE 1101 INCEPTION (BEET 101) BYNDID 1801 INCE

(43) International Publication Date 7 April 2005 (07.04.2005)

PCT

(10) International Publication Number WO 2005/031178 A1

- (51) International Patent Classification⁷: F16C 13/02, C23C 2/00, F16C 23/04, 33/10, 33/66, 33/58
- (21) International Application Number:

PCT/EP2004/052380

(22) International Filing Date:

30 September 2004 (30.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: RM2003A000447

30 September 2003 (30.09.2003) IT

- (71) Applicant (for all designated States except US): DANIELI & C. OFFICINE MECCANICHE S.P.A. [IT/IT]; Via Nazionale 41, I-33042 Buttrio (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): POLONI, Alfredo [IT/IT]; Via G. Paolini 29, I-34070 Fogliano Redipuglia (IT). DE LUCA, Andrea [IT/IT]; Via Candotti, 61, I-33047 Remanzacco (IT). PAIARO, Ivan [IT/IT]; Via del Capitello 75, I-34077 Ronchi Dei Legionari (IT).
- (74) Agent: GERVASI, Gemma; Notarbartolo & Gervasi S.p.A., Corso di Porta Vittoria 9, I-20122 Milan (IT).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

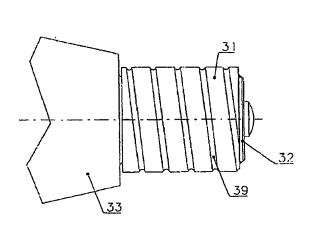
of inventorship (Rule 4.17(iv)) for US only

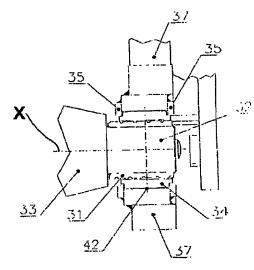
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SUPPORT BEARING FOR A ROLL





(57) Abstract: Support bearing for a roll (33) for immersion in liquid metal, comprising an internal rotating bush (31) fitted coaxially on a pin (32) at the end of the roll (33), and rotating inside an external bush (34) fixed to a supporting arm (37) of the roll (33). The first bush (31) is provided with an axial helical groove (39) on its outer surface and the second bush (34) is provided with a toroidal-shaped convex outer surface to allow rotation without friction inside the cylindrical ring of the supporting arm (37).